Message

From: Andrae, Bill/MKE [William.Andrae@jacobs.com]

Sent: 1/13/2021 9:11:18 PM

To: Giancarlo, Mary Beth [Giancarlo.Marybeth@epa.gov]

CC: Reif, Marty/WDC [Marty.Reif@jacobs.com]; Skwarski, Alison/DET [Alison.Skwarski@jacobs.com]

Subject: RE: Site Visit to Bark Camp and recommendations on sediment capping and seeding.

Thanks Mary Beth – Both emails were received.

Cheers!

Bill

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From: Giancarlo, Mary Beth < Giancarlo. Marybeth@epa.gov>

Sent: Wednesday, January 13, 2021 11:13 AM

To: Andrae, Bill/MKE <William.Andrae@jacobs.com>; Reif, Marty/WDC <Marty.Reif@jacobs.com>; Skwarski, Alison/DET

<Alison.Skwarski@jacobs.com>

Subject: [EXTERNAL] FW: Site Visit to Bark Camp and recommendations on sediment capping and seeding.

2 of 2 e-mails

From: Mike Johnson <mjohnson@summitmetroparks.org>

Sent: Tuesday, January 12, 2021 8:17 PM

To: Giancarlo, Mary Beth < Giancarlo. Marybeth@epa.gov >; William. Zawiski@epa.ohio.gov;

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< William.Andrae@jacobs.com>; Reif, Marty/WDC (Marty.Reif@jacobs.com) < Marty.Reif@jacobs.com>; Skwarski,

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Cc: Lisa King < LKing@summitmetroparks.org>; Rob Curtis < rcurtis@summitmetroparks.org>; Deidre May

<dmay@summitmetroparks.org>; Nick Moskos <nmoskos@summitmetroparks.org>; dpinter@firstenergycorp.com;

Megan Shaeffer < MShaeffer@summitmetroparks.org>; Deidre May < dmay@summitmetroparks.org>

Subject: Site Visit to Bark Camp and recommendations on sediment capping and seeding.

Hello Team. Below is a summary of our site visit to Bark Camp and recommendations from Metro Parks on contouring, capping, and seeding the depositional area.

Thanks

Mike Johnson

Chief of Conservation

On January 6, Rob Curtis and I met with Heather Ullinger and Mike Wytrzyszczewski at the Bark Camp Mine Reclamation Site in Western PA. This is the project that was submitted by Tipping Point and Jacobs as a reference for the PFTM methodology we are considering to contain the sediments dredged from the dam pool. The project was implemented to address acid drainage from past coal mining activity. The footprint is about 30-acres (similar to ours). In this particular situation, they brought in dredged sediment from New York and mixed it with cement and existing mine spoil to encapsulate the area. They topped the site with a soil and organic compost material to facilitate the growth of a heavily planted grassland. Their project differed from ours in that they encapsulated a valley while we are essentially building a hill. Their goal was to stabilize the area, stop the acid mine drainage, and they were targeting a grassland rather than a forest so no trees were planted. They also incorporated a series of wetland cells to assist with treatment of the acid mine drainage. The project was completed in the late 1990's. Photographs attached.

Overall, their project was successful. The site appears relatively stable and apparently has been so for at least 25 years. The entire site is covered in vegetation. Although they planted non-native grasses, native species are slowly moving in. This is an encouraging sign that a more aggressive seeding of native plants will jump start this process. No trees have colonized from the surrounding forested areas. This is unfortunate but really not unexpected considering their remedial strategy. Although we will plant trees as part of our efforts, they may struggle to get started and we may have to wait a few generations before this is a forest again. As a more local reference, look at the hillside on the east side of Sand Run Road. City of Akron stabilized that slope nearly 20 years ago. Although they did almost everything we asked them, the forest we planted is just now starting to develop. Few of the trees are over 15 feet.

Based on everything presented via the stakeholder process, our own research/experience, and this final site visit, we propose the following guidance that we would like to submit to Jacobs. We feel this will give us the best ecological lift and is our best chance for a native ecosystem and eventual forest.

- 1. We approve the PFTM method. There are still details to work out but this is really our best option.
- 2. The site should be designed to have contours similar to the slopes on the opposite side of Peck Road. Metro Parks will provide a specific reference reach that can me used as a model to design the contours of the depositional area.
- 3. After reaching final subgrade the PFTM should be broken up to a depth of at least one foot.
- 4. The site should be capped with native soil collected from the borrow area Rob Curtis previously identified. This area is a vertical column of material and is composed of silts, clay, sand, and light topsoil and organic matter.
- 5. The cap soil should be taken from the borrow site and placed over the contained sediment in the most delicate and simplest manner. The materials should not be mixed to try and obtain a homogenous appearance and it should not be mixed with any additional material brought in from off-site.
- 6. Every effort should be made to prevent compaction of the cap material. The material should be loosely placed in workable bands/strips so that the heavy equipment is backing off as they lay it down with little or no final grading required. If necessary, loose grading, such as that performed by an excavator with a toothed digging bucket reaching from a position off of the cap material as it is applied, may be acceptable. No equipment should be driven over borrow cap material after it is applied.
- 7. Each workable band/strip of final-graded cap material should be hydroseeded with appropriate native mix, erosion control mulch and cover crop according to attached specs as they are completed. Please note that there are separate seed mixes for different parts if the sediment depositional area (dry, mesic, and wet).
- 8. Additional necessary tasks, planting or erosion control measures should be installed manually.
- 9. We have ruled out the idea of perched wetlands on top of the containment area. However, I do think there is opportunity to create some interesting wetlands and vernal pool habitats further down the slopes that would intercept runoff from above. We should work with Jacobs to incorporate some vernal pool habitats on the far downslope site of the feature. We will attempt to illustrate this in the reference reach example we provide.
- 10. A buffer of vegetation should be left between the depositional area/construction activity and Cuyahoga Street to maintain a pleasant view along this park thorofare.

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